Environmental Remediation Group

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SENT VIA ELECTRONIC MAIL

October 19, 2020

Mr. Jeffrey Hull
Town of Wilmington
121 Glen Road
Wilmington, MA 01887

Subject: **Aerial Electromagnetic Survey**
Olin Chemical Superfund Site
Wilmington, MA

To Whom it May Concern,

Olin Corporation (Olin) prepared this letter at the request of the United States Environmental Protection Agency (USEPA) to inform the Town of Wilmington of an upcoming aerial electromagnetic (AEM) survey that will be conducted as part of on-going environmental investigations associated with the Olin Chemical Superfund Site (OCSS). The AEM survey is anticipated to be completed during the week of November 2nd or 9th, 2020. We will inform the appropriate Town authorities when the schedule has been confirmed. USEPA is requiring the work and has approved the AEM method to be used.

The AEM survey will be conducted to gather data related to bedrock topography underlying the Maple Meadow Brook Wetland. The AEM method is being utilized because more typical methods of obtaining the required information are not feasible given the inundation of this area. The AEM survey is specifically designed to obtain information related to:

1. Depth to bedrock below ground surface
2. Identification of other potential areas of environmental impact in groundwater (if they exist)
3. Locations of significant fracture networks within the upper portion of bedrock

The AEM survey will be performed by a recognized consultant in the industry, Balch Exploration Consulting, Inc. (BECI), with helicopter services provided by a local aviation company. Activities related to the AEM survey will be coordinated and overseen by Olin's environmental consultant, Wood Environment and Infrastructure Solutions, Inc. (Wood). The specific activities will be conducted in accordance with the Site Health and Safety Plan (HASP), and the USEPA-approved Standard Operating Procedures (SOP) and Site Management Plan. Appropriate notifications will be provided to the Federal Aviation Administration (FAA) prior to mobilizing to the site.

Equipment and materials related to the AEM survey will be staged and stored on the Olin property at 51 Eames Street. The helicopter will take off from and land on the Olin property. It is expected that equipment related to the project will be delivered and assembled on-site in advance of the work and that all data collection (requiring helicopter flights) will be completed within one to two business days.

During the AEM survey, an instrument capable of transmitting and receiving electromagnetic and magnetic data will be suspended from the helicopter and flown in a grid pattern over the Maple Meadow Brook Wetland and the Olin property. The instrument, developed and built by industry experts, is approximately 27 feet in diameter and consists of data collection tools and a transmitter to communicate data in real time to an on-board GPS system. Additional information and depictions of the equipment to be used is included in the attached fact sheet.

Data collected during this survey will be used to make informed decisions regarding future investigation activities in and around the Maple Meadow Brook Wetland as well as remedy-related pre-design efforts.

Olin will provide a copy of the attached fact sheet to the Town of Wilmington Fire and Police Departments prior to the start of the work. In addition, a copy of the fact sheet will be placed in the mailboxes of private residences and businesses adjacent to the Olin property and surrounding Maple Meadow Brook Wetland where helicopter operation may be heard or visually observed.

Olin and USEPA representatives are available to provide clarification and answer questions from the Town prior to conducting this work.

Please contact me at 423-650-1836 or jmcashwell@olin.com if you have any questions regarding the information contained in this letter or the attached fact sheet.

Sincerely,
OLIN CORPORATION

James M. Cashwell
Director, Environmental Remediation

Attachment: AEM Fact Sheet

cc: Lynne Jennings (USEPA)
Josh Fontaine (USEPA)
Chinny Esakkiperumal (Olin)
Libby Bowen (WOOD)

Aerial Electromagnetic Survey (AEM)
Fact Sheet

What is an AEM Survey?

- An AEM survey is a technique that uses electromagnetic data to further characterize bedrock topography and fracture zones, and identify potential areas of groundwater that have characteristics of environmental impacts
- Data is collected via a transmitter that is suspended from a helicopter that flies over the area of interest along pre-determined flight lines
- A photo and illustration of a typical AEM configuration are below

(Above) The transmitter, approximately 27 feet in diameter, in the foreground, and helicopter and support vehicles in the background.

(Right) The helicopter in flight with the magnetometer and transmitter suspended below as the helicopter moves through its flight path

What is the Purpose of the AEM Survey?

- Gather bedrock topography data beneath the Maple Meadow Brook Wetlands as part of the United States Environmental Protection Agency (USEPA)-approved Olin Chemical Superfund Site (OCSS) Data Gaps Investigation
- This data cannot be collected via a land survey because the Maple Meadow Brook Wetland is inundated with water and is inaccessible over land

Where will the AEM Survey be conducted?

- Equipment and materials for the AEM survey will be staged and stored at Olin's 51 Eames St. property – the helicopter will also take off and land from this location
- The helicopter will fly over the Maple Meadow Brook Wetland along flight lines spaced approximately 100' apart. The approximate flight lines are shown below

The white lines on the photo above represent the flight lines over Maple Meadow Brook.
The arrow in the right portion of the photo show the approximate location of the take-off and landing areas on the OCSS.

Special Considerations:

- AEM surveys are a proven and widely used data collection technique – Use of this technology has been approved by the USEPA for the OCSS project
- AEM surveys are safe to humans and wildlife and will have no impact on the wetlands
- Necessary precautions have been taken to ensure the work will be done safely
- Notifications to the Federal Aviation Administration (FAA) will be provided as required
- Data collection area is designed to minimize helicopter flight over densely populated areas
- The appropriate Standard Operating Procedure (SOP), site Health and Safety Plan (HASP), and Site Management Plan have all been reviewed by USEPA
- Town of Wilmington officials, local Police and Fire Departments, and occupants of surrounding businesses and residences will be notified in advance

Schedule:

- Work is expected to be conducted during the weeks of 11/2 or 11/9/20
- Data collection (via helicopter flights) is expected to take ~1-2 business days